

# SERVICE MANUAL

DVD PLAYER

BASIC DVD MECHANISM : LDM-H109  
(6721R-0300A)

This Service Manual is the "Revision Publishing" and replaces "Simple Manual"  
(S/M Code No.09-99C-337-5T4).

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## SPECIFICATIONS

### DVD VIDEO PLAYER

<b>Power supply</b>	110~240V, 50~60Hz
<b>Power consumption</b>	20W
<b>Mass</b>	3.5kg(7.7lbs)
<b>External dimensions</b>	430 x 91 x 293 (W × H × D)
<b>Signal system</b>	NTSC
<b>Laser</b>	Semiconductor laser, wavelength 655nm(DVD)/795nm(CD)
<b>Frequency range (digital audio)</b>	2Hz to 44kHz
<b>Signal-to-noise ratio (digital audio)</b>	More than 105dB (EIAJ)
<b>Audio dynamic range (digital audio)</b>	More than 95dB (EIAJ)
<b>Harmonic distortion(digital audio)</b>	0.003%
<b>Wow and flutter</b>	Below measurable level (less than +0.001%(W.PEAK)) (EIAJ)
<b>Operations</b>	Temperature : 5°C(41°F) to 35°C(95°F), Operation status : Horizontal

### OUTPUTS

<b>Video outputs</b>	1.0V(p-p), 75Ω, negative sync., RCA jack × 1
<b>S video outputs</b>	(Y)1.0V(p-p), 75Ω, negative sync., Mini DIN 4-pin × 1 (C)0.286V(p-p), 75Ω
<b>Component video output</b>	(Y)1.0V(p-p), 75Ω, negative sync., RCA jack × 1 (Pb)/(Pr) 0.7V(p-p), 75Ω
<b>Audio output(digital audio)</b>	0.5V(p-p), 75Ω, RCA jack × 1
<b>Audio output(optical audio)</b>	Optical connector × 1
<b>Audio output(analog audio)</b>	2.0Vrms (1kHz, 0dB), 330Ω, RCA jack (L, R) × 2

- Design and specifications are subject to change without notice.
- Weight and dimensions shown are approximate.

## ACCESSORIES/PACKAGE LIST

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

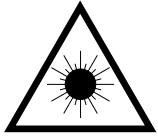
REF. NO	PART NO.	KANRI NO.	DESCRIPTION
1	S8-35R-S00-09M		EVNT INSTRUCTION ASSY<HR<N>>
1	S8-35R-S00-09L		INSTRUCTION ASSY<LH<N>>
3	S5-640-17B-000		PLUG ASSY PHONE CORD 1WAY
4	S5-640-18B-000		PLUG ASSY PHONO CORD
5	S7-11R-2N0-13B		REMOTE CONTROLLER A<LH<N>>
5	S7-11R-2N0-13C		REMOTE CONTROLLER A<HR<N>>

## PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

### WARNING!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

### VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylitävälle näkymättömälle lasersäteilylle.

### WARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstråling, som överskrider gränsen för laserklass 1.

### CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

### ATTENTION

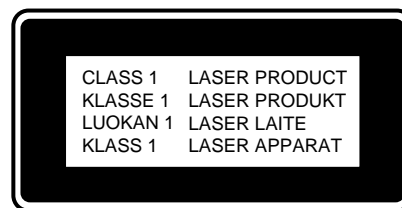
L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

### ADVARSEL!

Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.

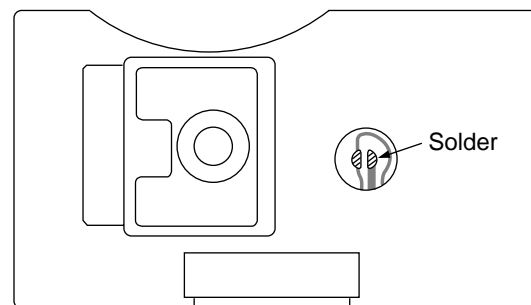
The CLASS 1 LASER PRODUCT label is located on the rear exterior.



## Precaution to replace Optical block (LPC-512A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

- 1) After the connection, remove solder shown in the right figure.



# DISASSEMBLY INSTRUCTIONS

## CAUTION BEFORE STARTING SERVICING

Electronic parts are susceptible to static electricity and may easily be damaged, so do not forget to take a proper grounding treatment as required.

Many screws are used inside the unit. To prevent missing, dropping, etc. of the screws, always use a magnetized screw driver in servicing. Several kinds of screws are used and some of them need special cautions. That is, take care of the tapping screws securing molded parts and fine pitch screws used to secure metal parts. If they are used improperly, the screw holes will be easily damaged and the parts can not be fixed.

## CABINET DISASSEMBLY

### 1. Top Case

- 1) Release 7 screws (A). (See Fig-1)
- 2) Lift the top case with holding the back of it, and remove it in the direction of the arrow.

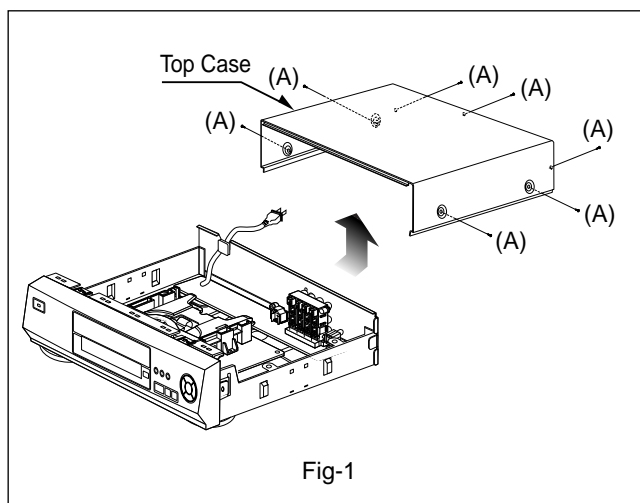


Fig-1

### 2. Tray Door

- 1) Eject the disc tray.
- 2) Lift up the tray door in the direction of the arrow.

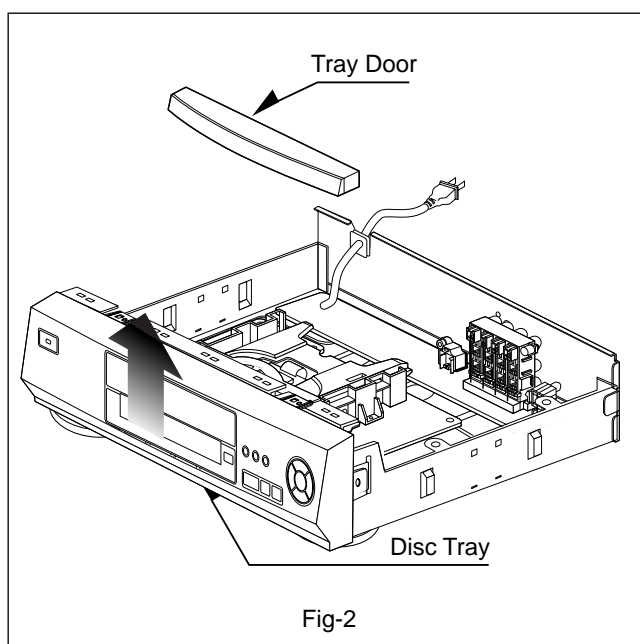


Fig-2

### 3. Front Panel

- 1) Eject the disc tray. (See Fig-2)
- 2) Remove the tray door. (See Fig-2)
- 3) Release 2 screws (B).
- 4) Pull the front panel toward you while pressing 7 stoppers to disengage, and remove the front panel. (See Fig-3)

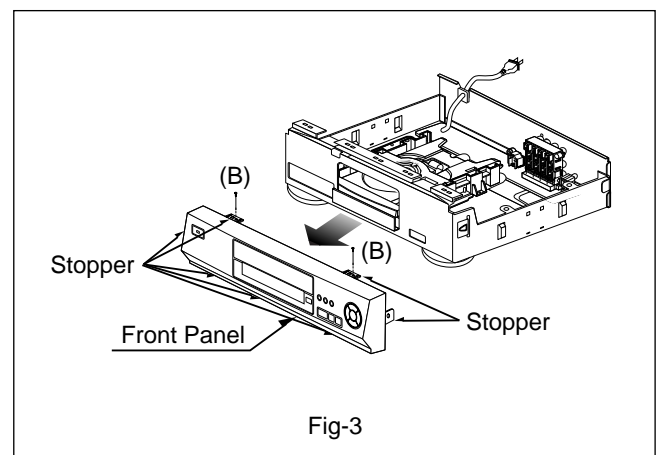


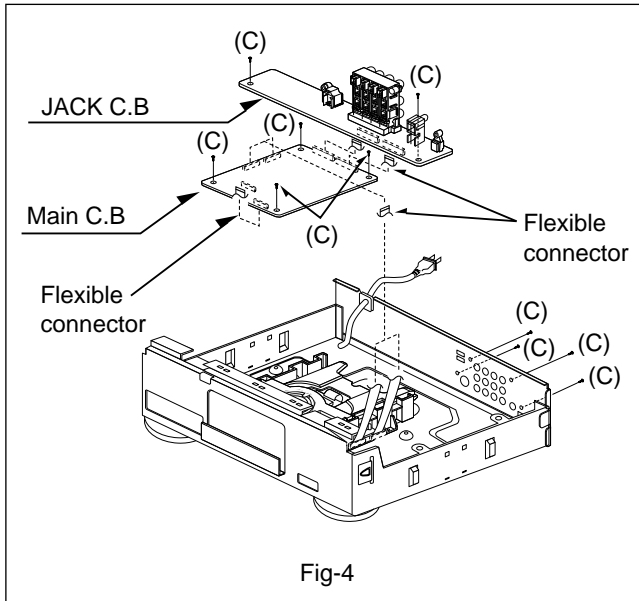
Fig-3

## CIRCUIT BOARD DISASSEMBLY

**Note:** Before removing the main circuit board, be sure to shortcircuit the laserdiode output land.  
After replacing the main circuit board, open the land after inserting the flexible connector.  
(Refer to Mechanism Disassembly)

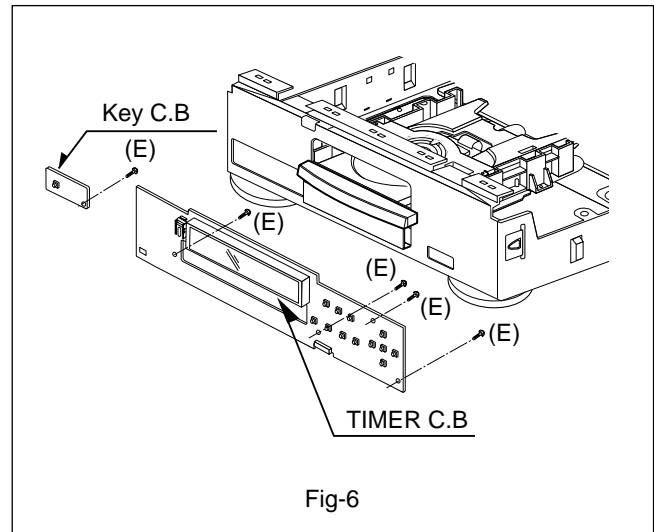
### 4. Main/JACK C.B

- 1) Remove the top case. (See Fig-1)
- 2) Release 10 screws (C), and take out the main/JACK C.B. (See Fig-4)
- 3) Remove the flexible connectors and the connector from main circuit board.
- 4) Then, remove the main JACK C.B.



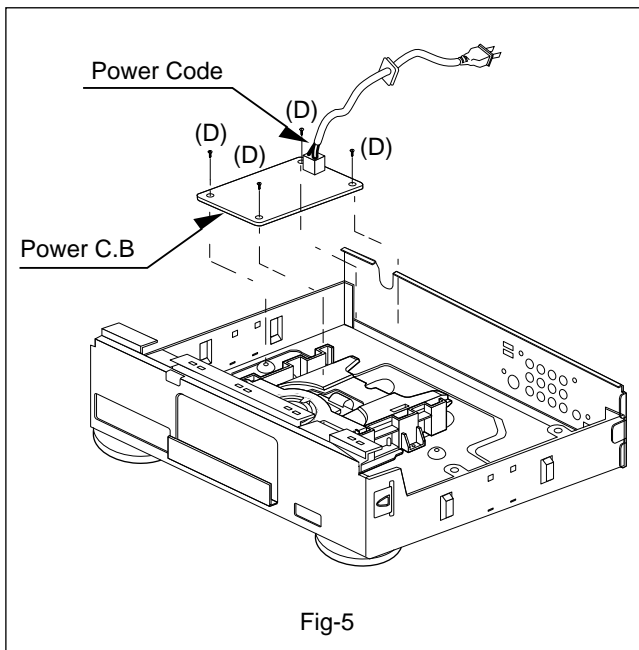
### 6. TIMER and Key C.B

- 1) Remove the front panel. (See Fig-3)
- 2) Release 5 screws (E), and remove the TIMER C.B.



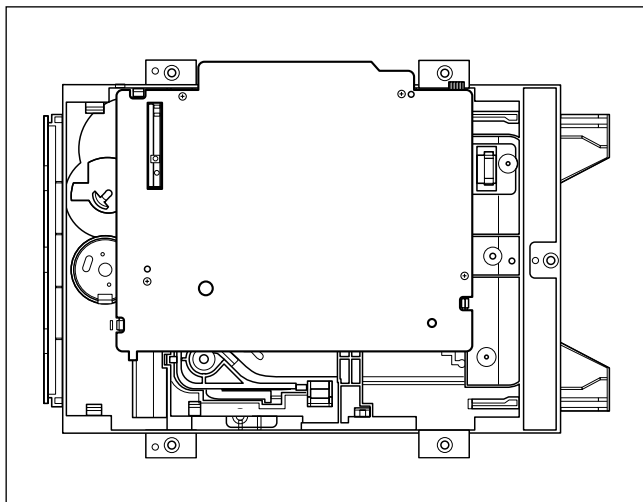
### 5. Power C.B

- 1) Release 4 screws (D). (See Fig-5)

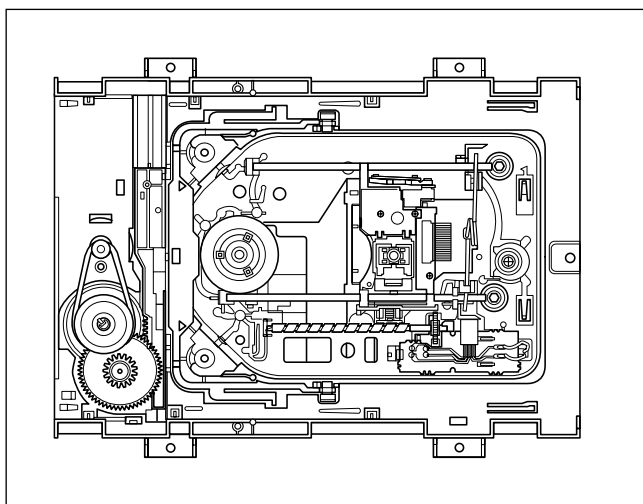
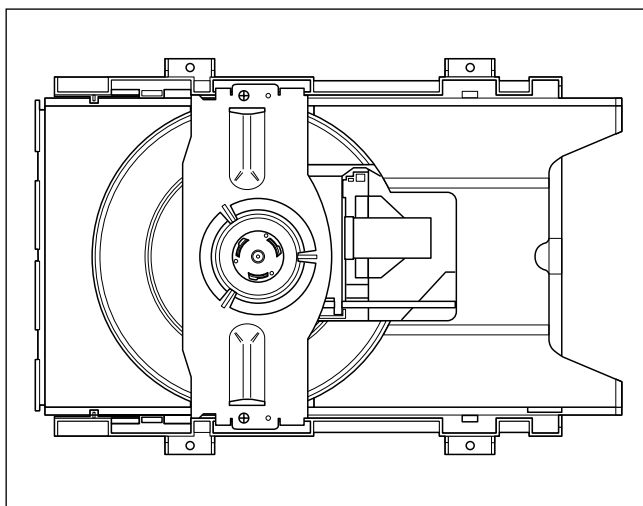


## DECK MECHANISM PARTS LOCATION

### • Bottom View



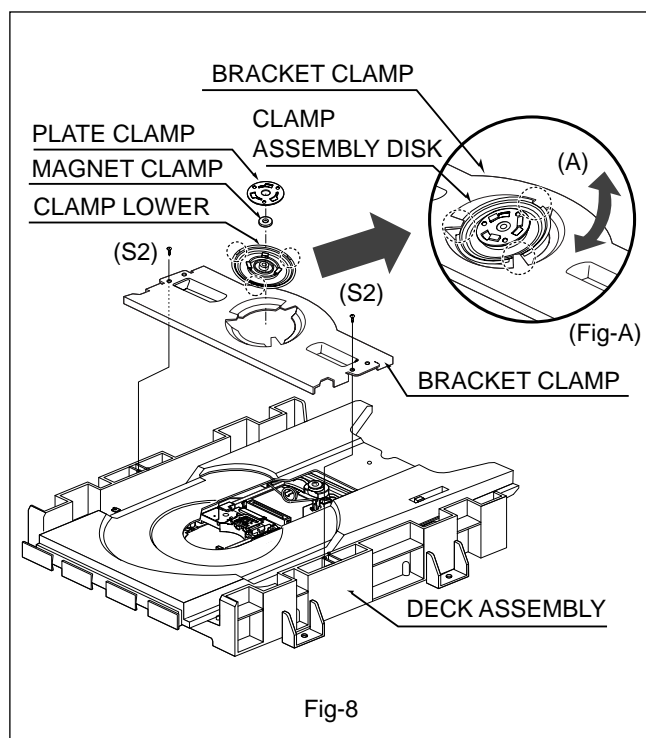
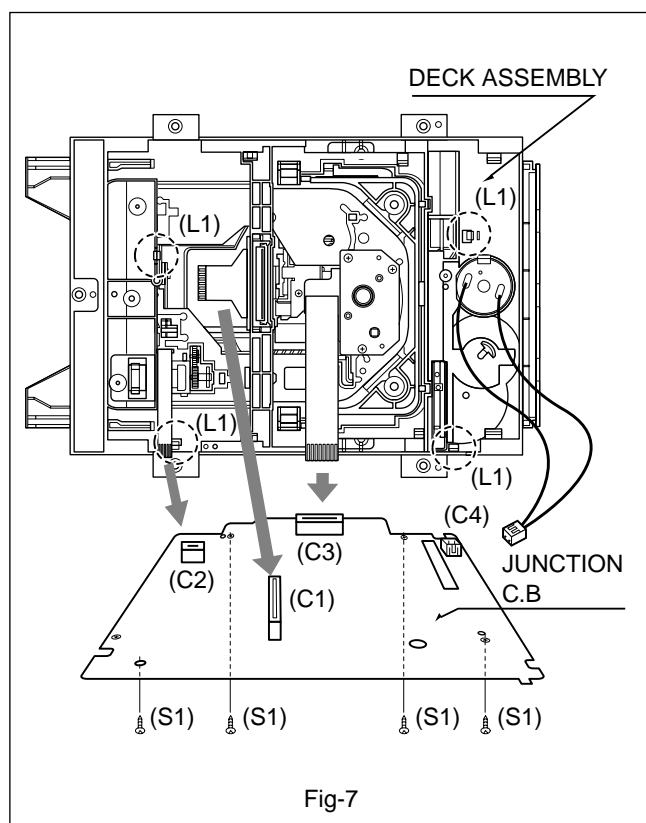
### • Top View



Procedure		Parts	Fixing Type	Disassembly	Figure
Starting No.					
	1	Junction P.C.Board	4 Screws, 4 Locking Tabs	Bottom	4-1
	2	Bracket Assembly Clamp	2 Screws		4-2
	3	Bracket Clamp			4-2
	4	Clamp Assembly Disk			4-2
	5	Plate Clamp			4-2
5	6	Magnet Clamp			4-2
5, 6	7	Clamp Lower			4-2
2	8	Tray Disk	1 Locking Tab		4-3
2, 8	9	Base Assembly Feed	1 Connector		4-4
2, 8	10	Rubber R	1 Screw		4-4
2, 8	11	Spring Skew	1 Hook		4-4
2, 8, 11	12	Shaft PU Main			4-4
2, 8, 11	13	Shaft PU Sub			4-4
2, 8, 12, 13	14	Mechanism Assembly PU Unit			4-4
2, 8, 12-14	15	Guide Freed PU	1Screw		4-4
2, 8, 12-14	16	Spring Guide Feed			4-4
2, 8, 12-16	17	Pick up Assembly General			4-4
2, 8, 9	18	Motor (Mech.)	3Screws	Bottom	4-4
2, 8, 9	19	Shaft Lead Screw			4-4
2, 8, 9	20	Motor Assembly PU Freed	2 Locking Tabs	Bottom	4-4
2, 8, 9-20	21	Base PU (Outsert)			4-4
1, 2, 8, 9	22	Base Assembly Main			4-5
1, 2, 8, 9	23	Holder Assembly Deck on	1 Locking Tab	Bottom	4-5
2, 8, 9	24	Frame Assembly Up/Down	2 Locking Tabs		4-5
2, 8, 9	25	Rubber F			4-5
2, 8	26	Belt Loading			4-5
2, 8, 26	27	GearPulley	1 Screw		4-5
2, 8, 26, 27	28	Gear Loading			4-5
2, 8, 26-28	29	Gear Emergency			4-5
2, 8, 26-29	30	Cam Loading			4-5
1, 2, 8, 26-30	31	Motor Assembly Loading	2 Screws	Bottom	4-5
1, 2, 8, 26-31	32	Base Main	1 Locking Tab		4-5

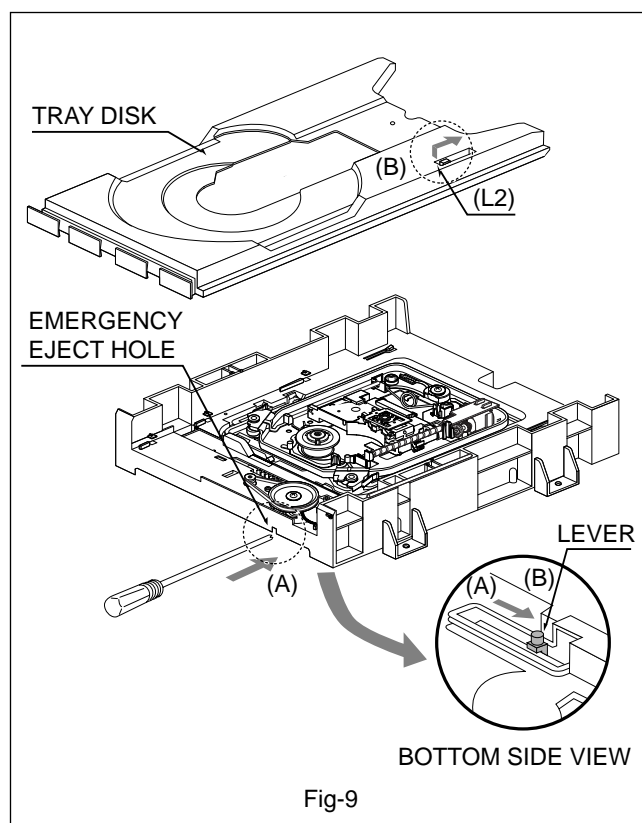
**Note:** When reassembling, perform the procedure in reverse order.  
The “Bottom” on Disassembly column of above Table indicates the part should be disassembled at the Bottom side.

## DECK MECHANISM ASSEMBLY



### 7. Junction C.B (Fig-7)

- 1) Put the Deck Assembly face down. (Bottom side)
- 2) Release 2 Screws (S2).
- 3) Unlock 4 Locking tabs (L1).
- 4) Lift up the Junction C.B a little to disconnect the Connector (C1).
- 5) Disconnect 3 Connectors (C2, C3, C4).



### 8. Bracket Assembly Clamp (Fig-8)

- 1) Put the Deck Assembly on original position. (Top side)
- 2) Release 2 Screws (S2).
- 3) Lift up the Bracket Assembly Clamp.

#### 8-1. Clamp Assembly Disk

- 1) Place the Clamp Assembly Disk as Fig-(A).
- 2) Lift up the Clamp Assembly Disk in direction of arrow (A).
- 3) Separate the Clamp Assembly Disk from the Bracket Clamp.

#### 8-1-1. Plate Clamp

- 1) Turn the Plate Clamp to counterclockwise direction and then lift up the Plate Clamp.

#### 8-1-2. Magnet Clamp

#### 8-1-3. Clamp Lower

#### 8-2. Bracket Clamp

### 9. Tray Disk (Fig-9)

- 1) Insert and push a Driver in the emergency eject hole (A) at the front side, or put the Driver on the Lever (B) of the Gear Emergency and pull the Lever (B) in direction of arrow (A) so that the Tray Disk is ejected about 15-20mm.
- 2) Pull the Tray Disk until the moving is locked by the Locking Tab (L2).
- 3) Unlock the Locking tab (L2) in direction of arrow (B).
- 4) Separate the Tray Disk completely.



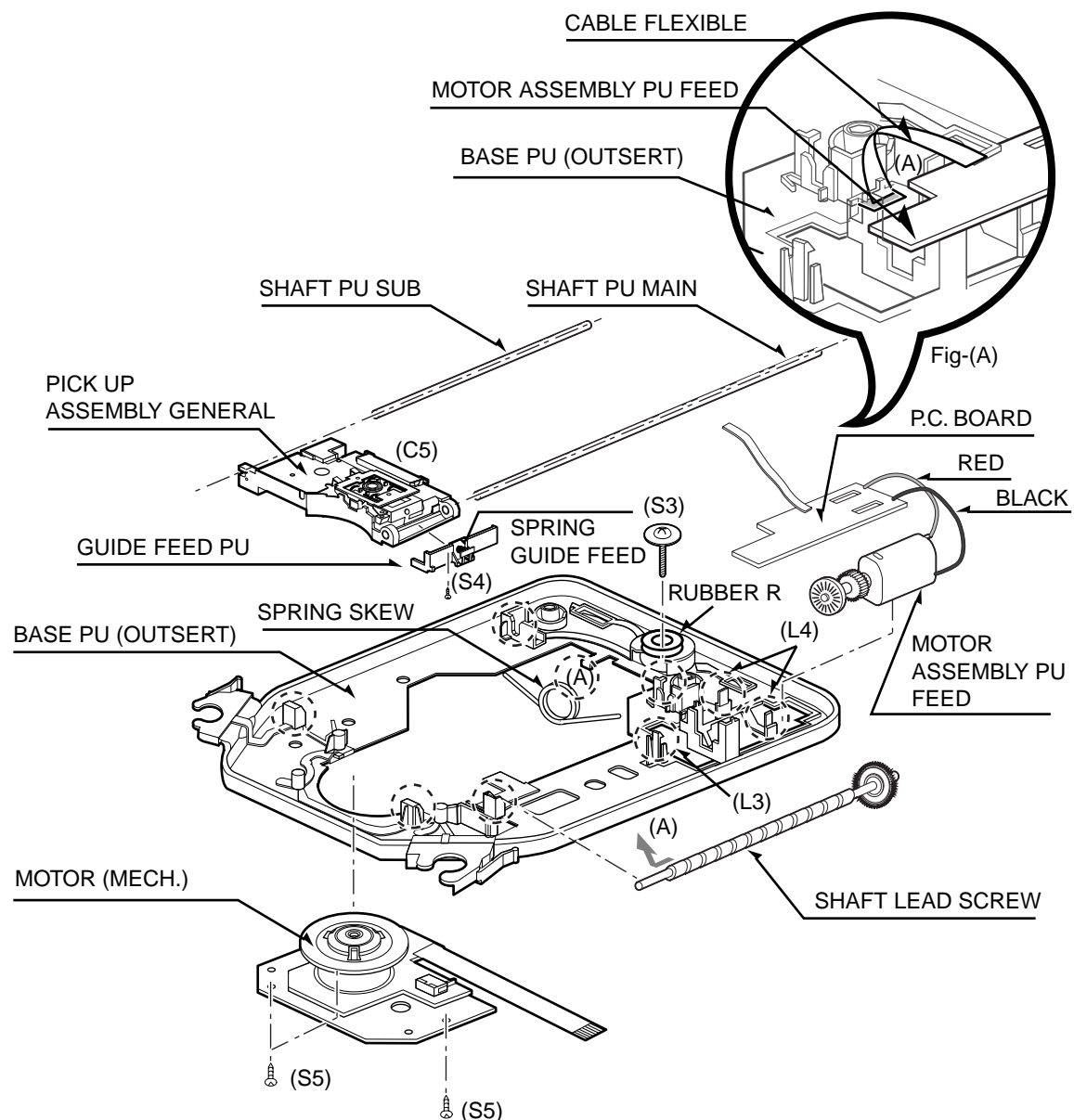


Fig-10

## 10. Base Assembly Feed (Fig-10)

- 1) Disconnect the Connector (C5)
- 2) Release the Screw (S3).

### 10-1. Rubber R

### 10-2. Spring Skew

- 1) Press the (A) position of the Spring Skew and unlock the Spring Skew locking.

### 10-3. Shaft PU Main

### 10-4. Shaft PU SUB

Note: When reassembling, be careful not to change the Shaft PU Main (Long) and the Shaft PU Sub (Short).

## 10-5. Mechanism Assembly PU Unit

### 10-5-1. Guide Feed PU

- 1) Release the Screw (S4) and separate the Guide Feed PU from the Pick up Assembly General.

### 10-5-2. Spring Guide Feed

### 10-5-3. Pick Up Assembly General

## 10-6. Motor (mech.)

- 1) Release the 3 Screws (S5) at bottom side.
- 2) Push down the Motor (Mech.) and separate from the Base PU (Outsert).

## 10-7. Shaft Lead Screw

- 1) Push the Shaft Lead Screw in direction on arrow (A) a little and lift up the Shaft Lead Screw.

## 10-8. Motor Assembly PU Feed.

- 1) Unlock the Locking tab (L3) and lift up the P.C.Board.
- 2) Unlock two Locking Tabs (L4) and push down the Motor Assembly PU Feed.
- 3) Separate the Motor Assembly PU Feed from the Base PU (Outsert).

Note: When reassembling, place the Motor Assembly PU Feed as Fig-(A) and insert the Cable Flexible to the Hole (A) of the Base PU (Outsert). (See Fig-(A))

## 10-9. Motor (mech.)

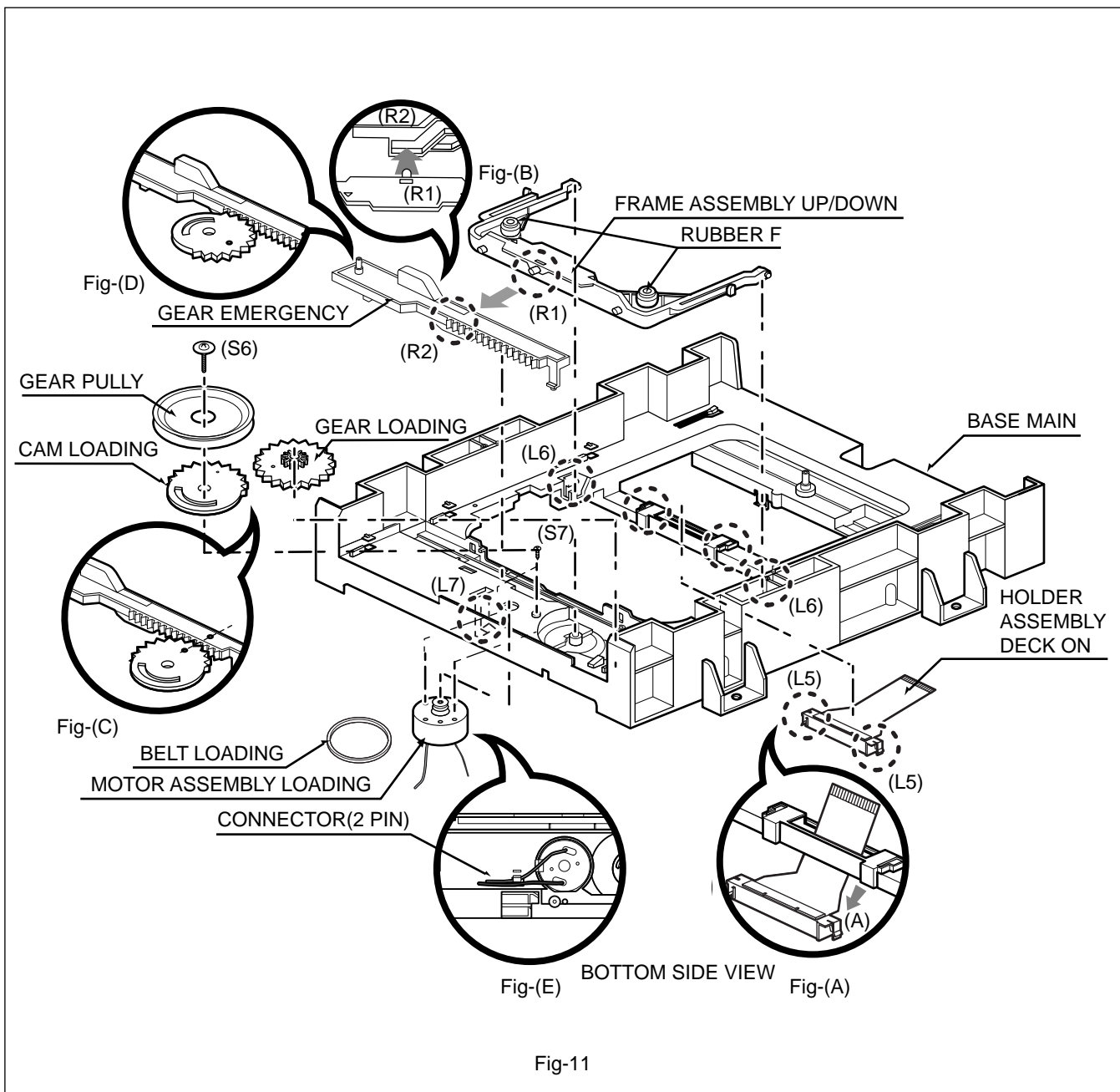


Fig-11

## 11. Base Assembly Main (Fig-11)

### 11-1. Holder Assembly Deck On

- 1) Push the Locking tabs (L5) at bottom side of the Holder Assembly Deck On in direction of arrow (A) and separate to bottom side. (See Fig-(A))

### 11-2. Frame Assembly Up/Down.

- 1) Push the two Locking tabs (L6) and lift up the Frame Assembly Up/Down.

**Note:** When reassembling, insert the Lever (R1) of the Frame Assembly Up/Down to the Groove (R2) of the Gear Emergency and lock the two Locking Tabs (L6). (See Fig-(B))

### 11-3. Rubber F

### 11-4. Belt Loading

### 11-5. Gear Pulley

- 1) Release the Screw (S6) and lift up the Gear Pulley.

### 11-6. Gear Loading

### 11-7. Gear Emergency

**Note:** When reassembling, confirm that the Hole (A) of the Cam Loading is aligned to the Hole (B) of the Gear Emergency as Fig-(C).

For this alignment, place the Gear Emergency and Cam Loading as Fig-(D), and then move the Gear Emergency in direction of arrow (B) until these two gears are aligned as Fig-(C).

### 11-8. Cam Loading

### 11-9. Motor Assembly Loading

- 1) Release two Screws (S7).
- 2) Unlock the Locking tab (L7) and separate the Motor Assembly Loading to bottom side.

**Note:** When reassembling, confirm that the Connector (2 Pin) is aligned as Fig-(E)

### 11-10. Base Main

# ELECTRICAL MAIN PARTS LIST

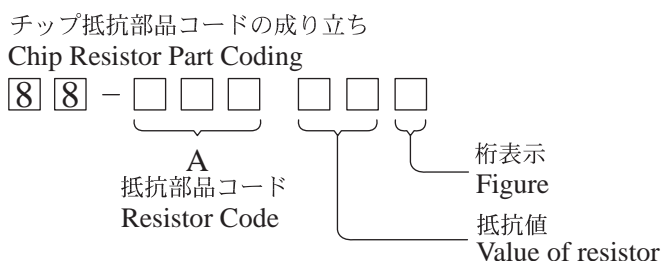
DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。  
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
IC				C216	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-RH3-308-00A	IC,BA3308<HR<N>>		C218	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-KE4-558-00A	IC,KIA4558P<HR<N>>		C219	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-TI7-437-40K	IC,SN74AHC374PWLE		C220	SC-H81-07C-621		C-CAP,100UF-6.3V
	SI-AM2-980-01A	IC,AM29F800B-120EC<LH<N>>		C224	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-AL4-916-14A	IC,AT49F1614-90TC<HR<N>>		C226	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-AL4-981-92B	IC,AT49F8192A-90TC<LH<N>>		C230	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-GS7-142-60E	IC,GM71C4260CJ-60		C302	SC-H81-07C-691		C-CAP,100UF-6.3V
	SI-MQ5-316-25A	IC,V53C16256HK50		C310	SC-H71-06F-621		C-CAP,10UF-16V
	SI-HI6-417-03B	IC,HD6417034AFI20		C311	SC-H71-06F-621		C-CAP,10UF-16V
	SI-AL2-402-10E	IC,AT24C02N-10SC-2.7		C708	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-SS2-402-10A	IC,KS24C021CS		C709	SC-H82-27D-611		C-CAP,220UF-10V
	SI-KE3-930-00G	IC,KIA393F-EL		C712	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-HY2-580-10A	IC,GDC25D801AA		C713	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-JR3-414-00C	IC,NJM3414AM-TE1,3K/REEL		C714	SC-H71-06F-621		C-CAP,10UF-16V
	SI-SH3-130-00A	IC,PQ3D213U		C718	SC-H71-06C-611		C-CAP,10UF-6.3V
	SI-CU3-000-00A	IC,ZIVA3-PE0		CE201	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-FA1-117-25A	IC,RC1117ST-2.5		CE202	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-SS4-161-02F	IC,KM4161020CT-G7		CE203	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-GS7-216-16C	ICGM72V161621ET-7		CE205	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-BB1-700-00A	IC,PLL1700E 20P		CE206	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-RH6-859-20A	IC,BA6859AFP-E2		CE210	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-RH5-983-20A	IC,BA5983FP-E2		CE211	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-SA8-661-12C	IC,LC866112B-5N21		CE221	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-SS7-542-00A	IC,KA7542Z		CE223	SC-H84-76C-611		C-CAP,47UF-6.3V
	87-001-196-010	IC,KIA7042P		CE228	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-BB1-716-00A	IC,PCM1716E 28P		CE609	SC-H81-07F-611		C-CAP,100UF-16V
	SI-JR4-580-00B	IC,NJM4580M		CE610	SC-H81-07F-611		C-CAP,100UF-16V
	SI-CB5-331-00A	IC,CS5331A-KS<HR<N>>		CE710	SC-H84-76C-611		C-CAP,47UF-6.3V
	SI-SH2-050-00A	IC,PQ20WZ5U 20WZ51		CE721	SC-H84-76C-611		C-CAP,47UF-6.3V<HR<N>>
	SI-RW8-610-00A	IC,BT861		CE722	SC-H84-76C-611		C-CAP,47UF-6.3V<HR<N>>
	SI-SK6-153-00A	IC,STR-G6153T 5P		CE723	SC-H71-05J-611		CAP,1U-35V<HR<N>>
	SI-SS4-310-00A	IC,KA431AZ		CE724	SC-H71-05J-611		CAP,1U-35V<HR<N>>
	SI-KE4-310-00A	IC,KIA431 3P		X101	S2-12H-B20-02A		CCR20.0MC6T TDK 20000000H
	SI-SS7-808-00H	IC,KA78R08 4P		X301	S2-02R-427-01G		C-RESO 27MHZ 20P
TRANSISTOR				JUNCTION C.B			
	ST-R38-750-9AC	CHIP KTC3875S-GR-T1		CE450	87-010-140-080		CAP,E 47-16V
	ST-R10-370-9BB	C-TR,2SA1037K-Q		CE451	87-010-140-080		CAP,E 47-16V
	ST-R10-300-9AE	TR,KRC103M		CE452	87-010-140-080		CAP,E 47-16V
	ST-R10-500-9AB	TR,KRC105M		CE453	87-010-140-080		CAP,E 47-16V
	ST-R10-500-9AD	TR,KRA105M		R451	SR-D01-01H-633		RES,1-1/2W
	ST-R15-040-9BF	TR,KTA1504S-Y		R452	SR-D01-01H-633		RES,1-1/2W
	ST-R15-050-9AD	TR,KTA1505S-Y		TIMER C.B			
	ST-R13-040-9BA	TR,KTDL304S		C500	SC-E22-73D-638		CAP,E 220-10V
	ST-R11-510-0AA	TR,KSBL151-Y		C501	SC-E10-63F-638		CAP,E 10-16V<HR<N>>
	ST-R31-980-9AC	TR,KTC3198-TP-BL		C502	SC-E10-63F-638		CAP,E 10-16V
DIODE				C506	SC-E47-63J-638		CAP,E 47UF-35V
	SD-R49-500-9AA	DIODE,RB495D		C507	SC-E10-63F-638		CAP,E 10-16V
	87-020-465-080	DIODE,1SS133		C512	87-010-140-080		CAP,E 47-16V
	SD-D19-300-9AB	C-DIODE,KDS193		C513	87-010-140-080		CAP,E 47-16V
	SD-D01-000-9CA	DIODE,EG01CW		DIG501	S3-02H-V00-1D0		7-BT-259GK DH
	87-A40-284-080	DIODE,ERA22-10		LED501	SD-L32-531-9AA		LED SPR325MVWT31(GRN)
	SD-D01-000-9AC	DIODE,EU01W		RC501	S7-12R-083-8GA		TSOP1238UQ1 TEMIC 8MM 37 RC
	87-017-352-010	DIODE,RU3YXLF-C1 100V2		SW501	S5-562-19B-000		SW,SKHV10910B
	SD-R10-451-0AA	DIODE,B10A45V1		SW502	S5-562-19B-000		SW,SKHV10910B
	SD-R18-020-9AA	DIODE,ERA18-02KFRB		SW503	S5-562-19B-000		SW,SKHV10910B
	SD-R15-402-0BA	DIODE,1N5402		SW503	S5-562-19B-000		SW,SKHV10910B
	SD-Z51-000-9HA	ZENER,MTZ5.1B 0.5W		SW504	S5-562-19B-000		SW,SKHV10910B
MAIN C.B				SW505	S5-562-19B-000		SW,SKHV10910B
C204	SC-H71-06C-611	C-CAP,10UF-6.3V		SW506	S5-562-19B-000		SW,SKHV10910B
C207	SC-H71-06C-611	C-CAP,10UF-6.3V		SW507	S5-562-19B-000		SW,SKHV10910B
C213	SC-H71-06C-611	C-CAP,10UF-6.3V		SW510	S5-562-19B-000		SW,SKHV10910B
C214	SC-H71-06C-611	C-CAP,10UF-6.3V		SW511	S5-562-19B-000		SW,SKHV10910B
C215	SC-H71-06C-611	C-CAP,10UF-6.3V		SW512	S5-562-19B-000		SW,SKHV10910B
				SW513	S5-562-19B-000		SW,SKHV10910B
				SW514	S5-562-19B-000		SW,SKHV10910B

REF. NO	PART NO.	KANRI NO.	DESCRIPTION	REF. NO	PART NO.	KANRI NO.	DESCRIPTION
X501	S6-160-20P-000	CSA6.00MGU MURATA 6MHZ		C934	SC-E47-7CD-638		CAP,E 470UF-10V
JACK C.B				△F901	S5-850-11T-000		FUSE,1600MA 250V
				△F902	87-001-196-010		ICP-N10 T104
				△IC903	S6-570-62B-000		SENSOR PC123Y
				△IC903	S2-309-024-040		SENSORLTV-817B PHOTO COU
				△L901	S6-161-45H-000		FILTER SHT LFS2020V4-04350
CV1	87-010-060-080	CAP,E 100-16V		△L901	S6-161-45J-000		FL BUJEON V-04350
CV10	SC-E10-86F-630	CAP,E 1000-16V		L902	S6-330-88G-000		COIL,CHOCK TP 5MM
JACK1	S6-12R-L00-1A0	TOTX178 HORIZONTAL JK		L903	S6-330-88D-000		COIL,20UH
JACK2	S5-720-75A-000	BJP-202L BAEEN BLACK		R901	S6-140-07R-000		RES,2.7-2W
JACK3	S6-12R-IH0-05G	PJ6031MG PARK ELEC AU PLATED					
JACK4	S6-12R-BH0-08A	YKF51-5506 JALCO HORIZONTAL4P		R902	SR-S10-03K-619		RES,100K-2W
KEY C.B				R911	SR-S05-10K-619		RES,0.51-2W
				R922	SR-S12-00J-619		RES,M/F 120-1W
				△T901	S6-420-23T-000		PT,SHT-023T/KSE-023T
LED501	SD-L32-531-9AA	LED SPR325MVWT31(GRN)		△V901	S6-560-04F-000		SVR681D10A SAMYANG 680V
SW508	S5-562-19B-000	SW,SKHV10910B					
				MIC C.B <HR>			
POWER C.B				CM1	87-015-681-080		CAP,E 10-16V<HR<N>>
C900	87-010-408-040	CAP,E 47UF-50V		CM2	SC-E10-76D-638		CAP,100M-10V<HR<N>>
C901	S6-240-88B-000	CAP,0.1UF-250V		CM3	87-015-681-080		CAP,E 10-16V<HR<N>>
C902	S6-240-88B-000	CAP,0.1UF-250V		CM4	87-015-681-080		CAP,E 10-16V<HR<N>>
C902	S6-240-88F-000	CAP,PCX2 275V 0.1UF,M		CM6	SC-E10-76D-638		CAP,100M-10V<HR<N>>
C903	S0-2TF-H68-0M0	CAP,E 68U-400V					
C905	87-016-375-010	CAP,0.01UF-630V		CM7	87-015-681-080		CAP,E 10-16V<HR<N>>
C906	S6-240-87B-000	CAP,100P-1KV		CM8	87-010-402-040		CAP,E 2.2-50V<HR<N>>
C907	SA-1B3-0KH-2M0	CAP,220PF-400V		CM10	87-010-402-040		CAP,E 2.2-50V<HR<N>>
C913	87-012-379-010	CAP,3300PF-400V		CM12	87-010-402-040		CAP,E 2.2-50V<HR<N>>
C916	87-010-387-010	CAP,E 470UF-25V KME		CM13	87-010-371-080		CAP,E 470-6.3V<HR<N>>
C918	87-010-112-080	CAP,E 100-16V		CM14	87-015-681-080		CAP,E 10-16V<HR<N>>
C919	87-010-408-040	CAP,E 47UF-50V		CM23	87-010-371-080		CAP,E 470-6.3V<HR<N>>
C921	SC-E22-76F-638	CAP,E 220UF-16V		CM25	87-015-681-080		CAP,E 10-16V<HR<N>>
C923	87-010-237-910	CAP,E 1000UF-16V		CM26	87-015-681-080		CAP,E 10-16V<HR<N>>
C924	87-010-237-910	CAP,E 1000UF-16V		MJ1	S6-12R-FV0-01B		HTJ-064-255GG KUNMING MIC PJK <HR<N>>
C925	87-010-375-080	CAP,E 330-10V		VR1	S1-10R-RHP-03A		VR,RK09K1110Z0223B 6.5-2<HR<N>>
C926	87-010-408-040	CAP,E 47UF-50V		VR2	S1-10R-RHP-03A		VR,RK09K1110Z0223B 6.5-2<HR<N>>
C927	87-015-684-080	CAP,E 47-16V		VR3	S1-10R-RHP-03A		VR,RK09K1110Z0223B 6.5-2<HR<N>>
C929	87-010-112-080	CAP,E 100-16V					
C932	SC-E47-7CD-638	CAP,E 470UF-10V					

- Regarding connectors, they are not stocked as they are not the initial order items.  
The connectors are available after they are supplied from connector manufacturers upon the order is received.

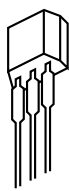
#### チップ抵抗部品コード／CHIP RESISTOR PART CODE



#### チップ抵抗 Chip resistor

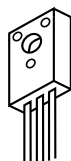
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード : A Resistor Code : A
				外形／Form	L	W	t	
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

# TRANSISTOR ILLUSTRATION



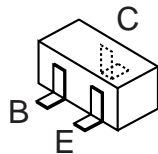
ECB

KRA105M  
KRC105M  
KRC103M



ECB

KSB1151

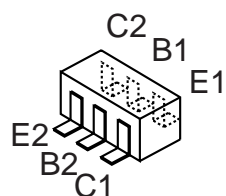


2SA1037K KTC3875S  
KTA1504S KTC4419  
KTA1505S KTD1304S  
KTC3198



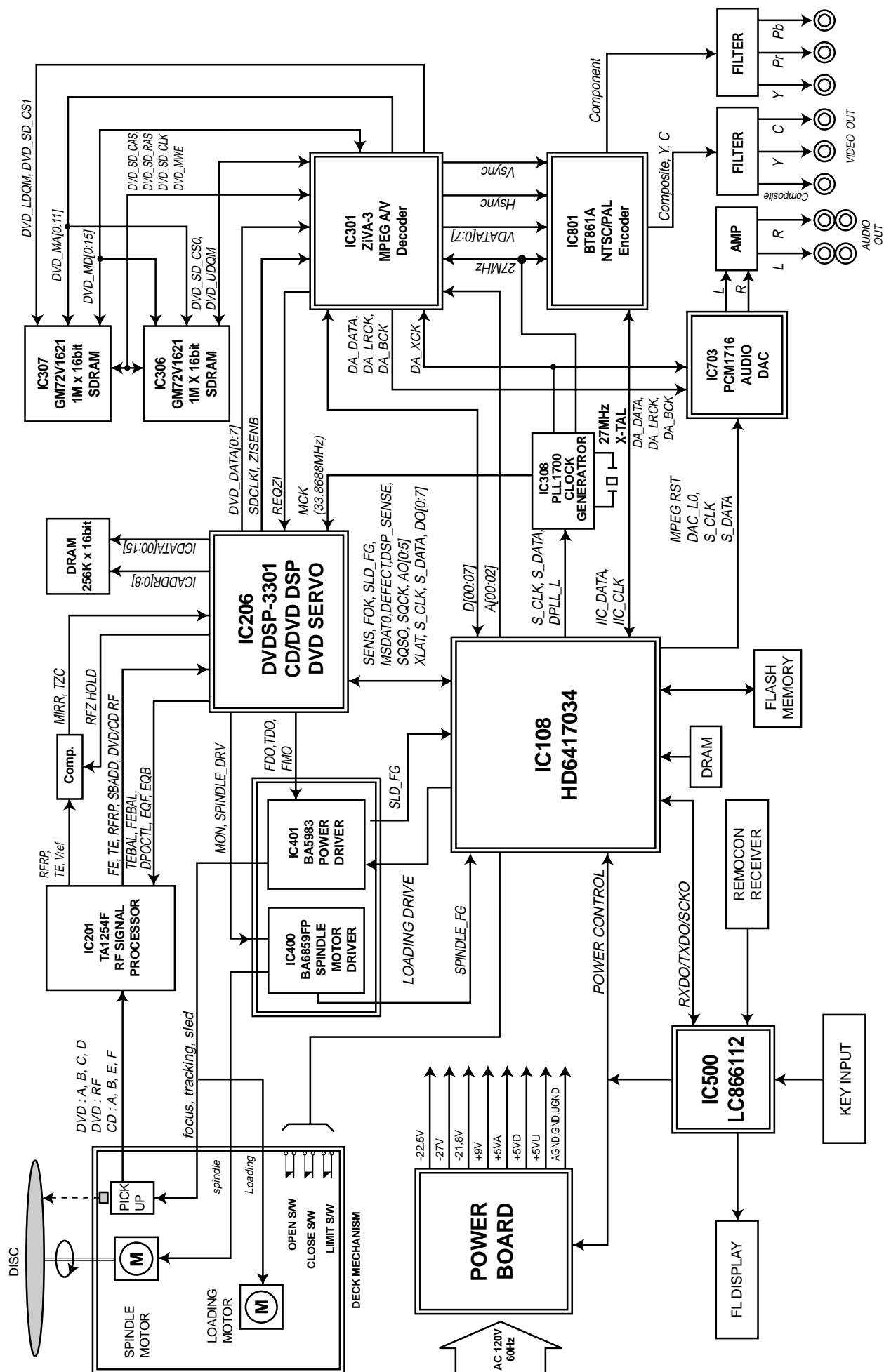
BCE

KSE13005F

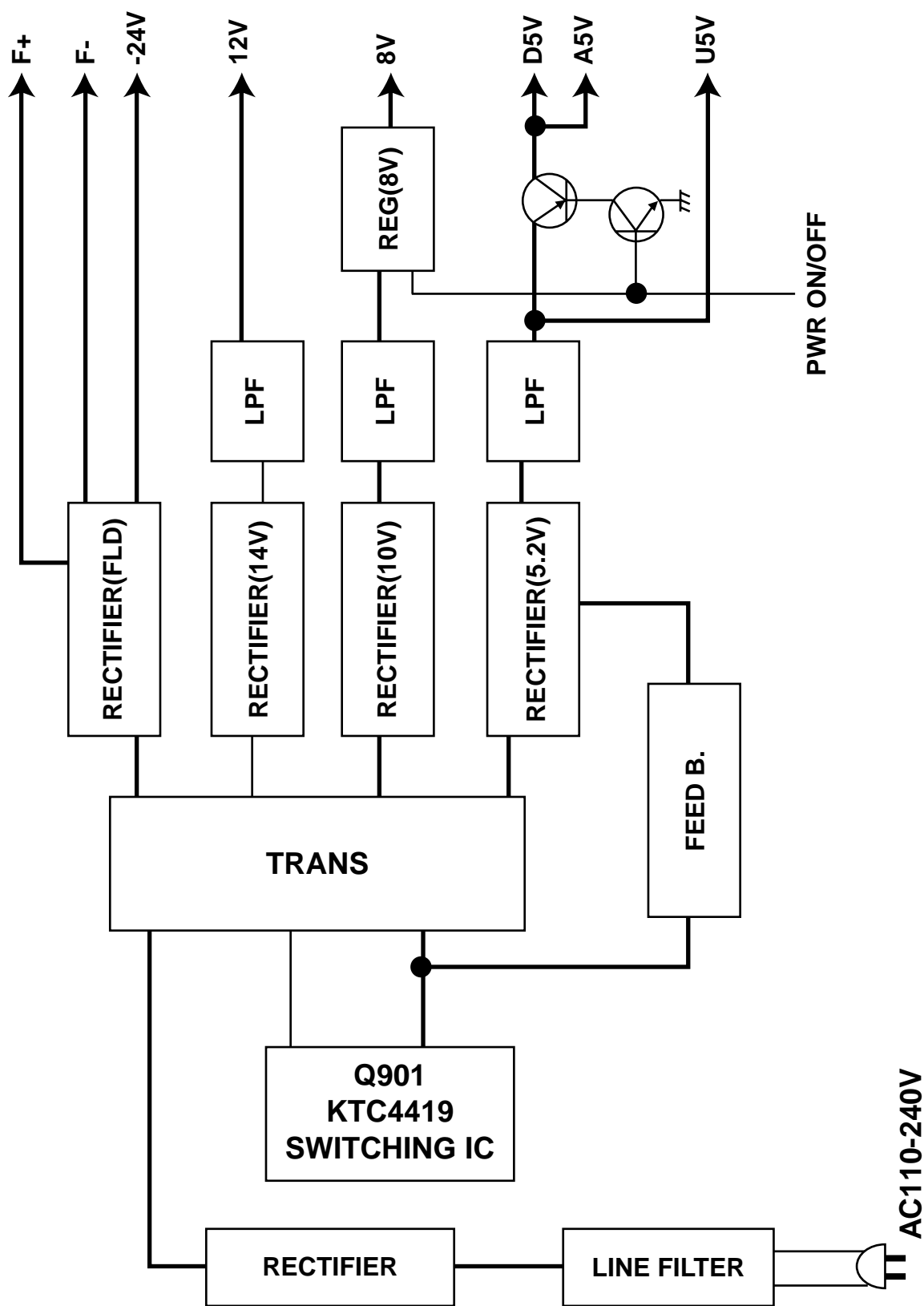


UMX1N  
UMZ1N

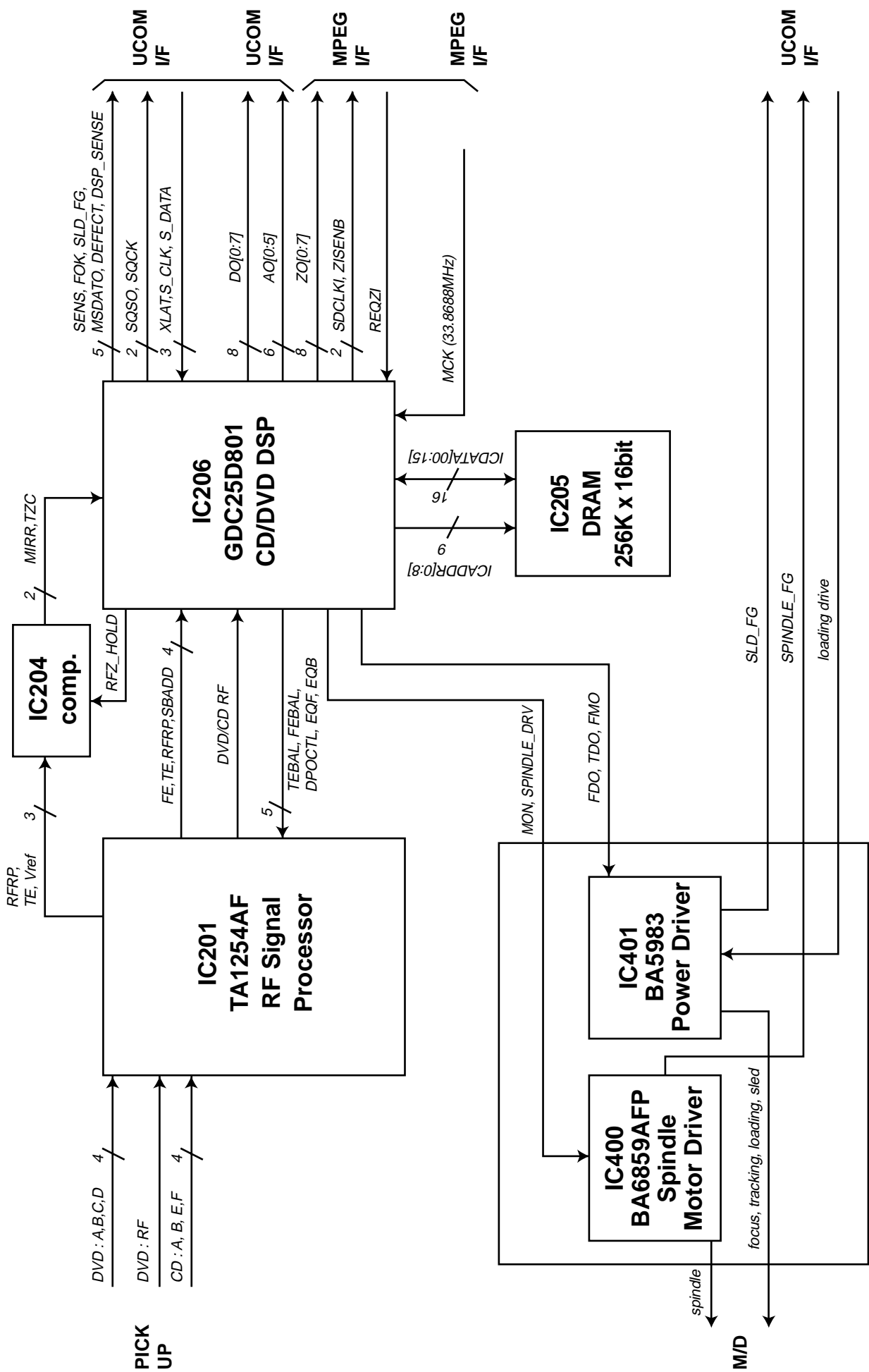
BLOCK DIAGRAM-1 (OVERALL)



BLOCK DIAGRAM-2 (POWER)

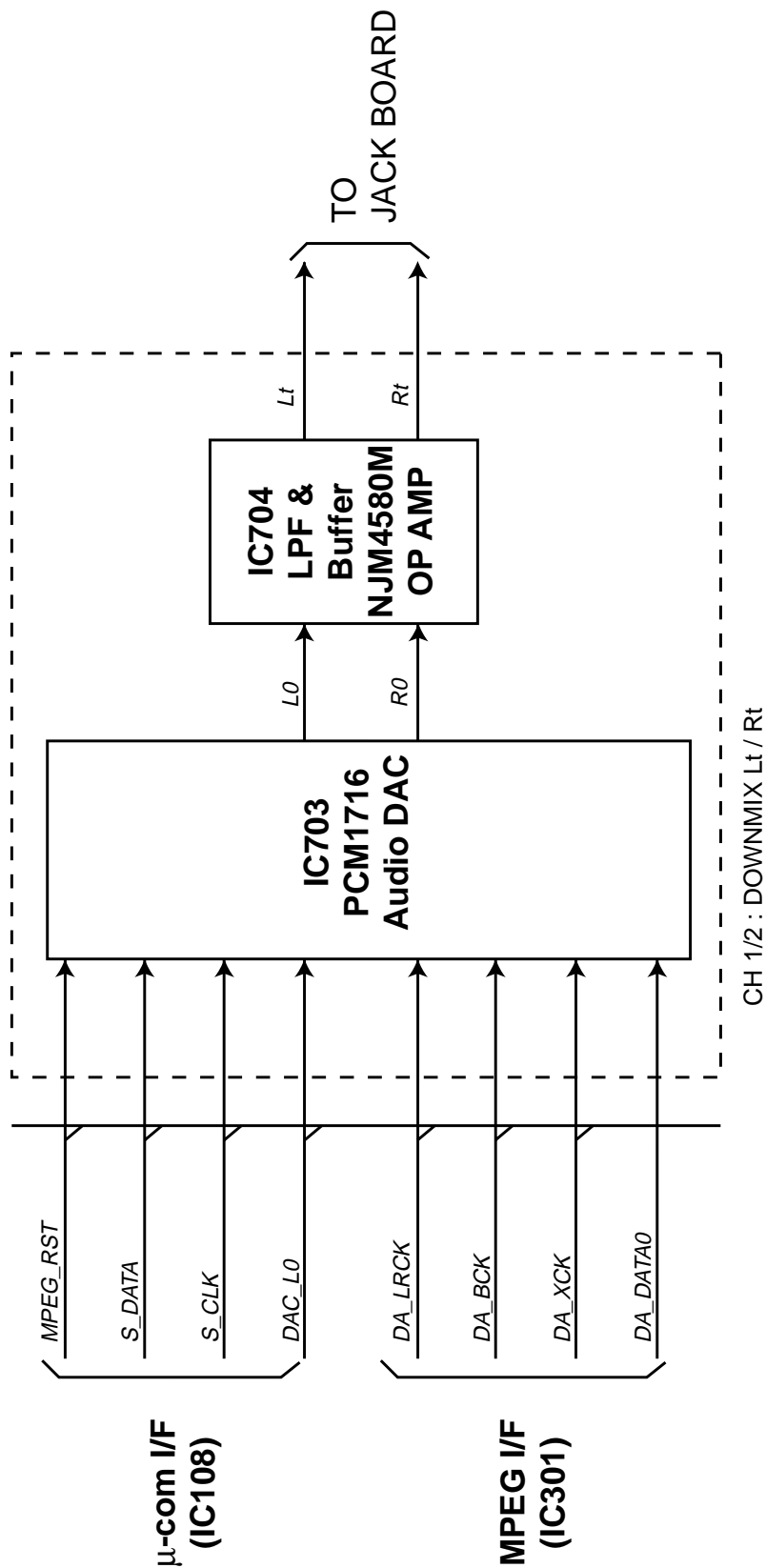


BLOCK DIAGRAM-3 (RF/DSP/SERVO)

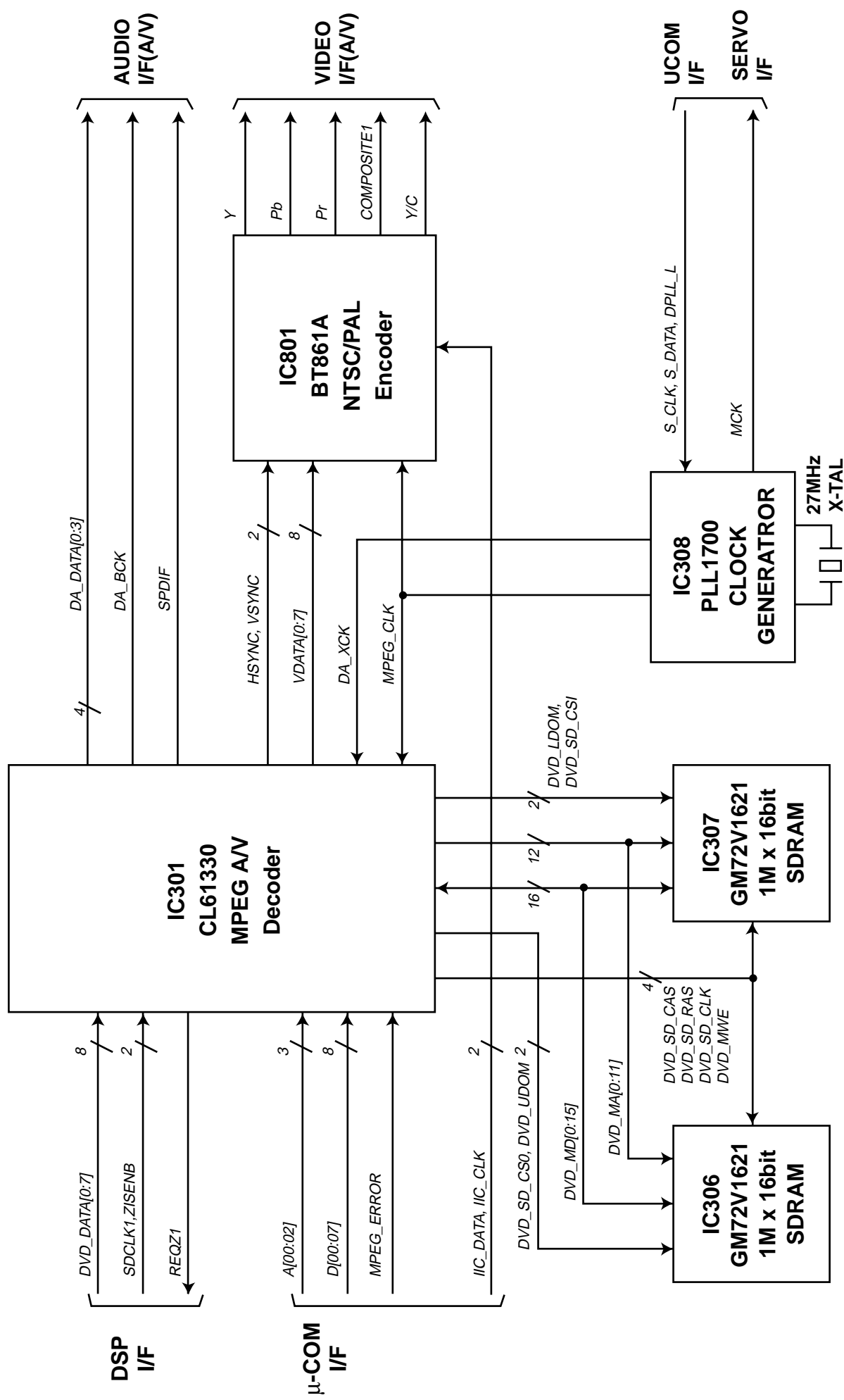




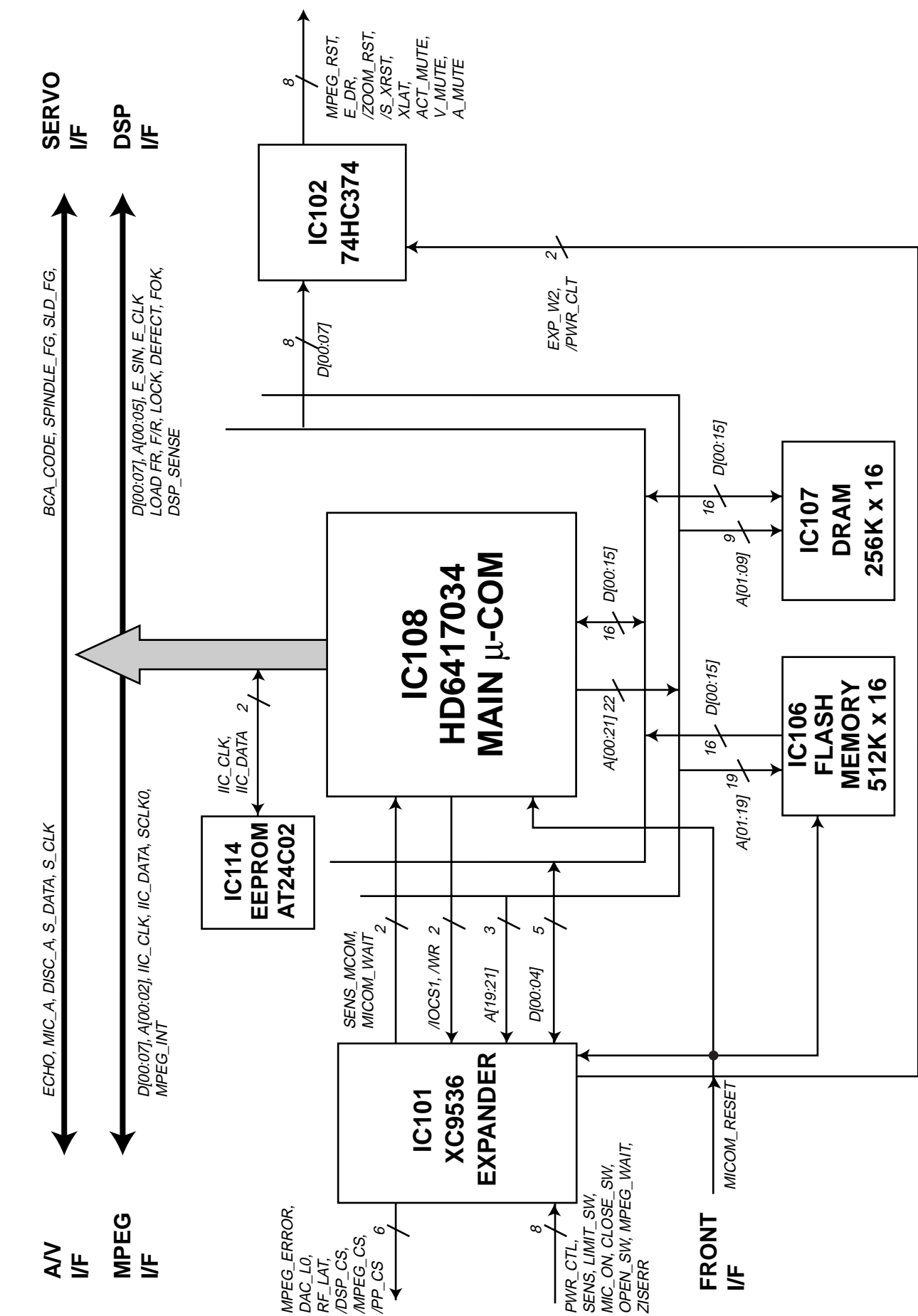
BLOCK DIAGRAM-4 (AUDIO)



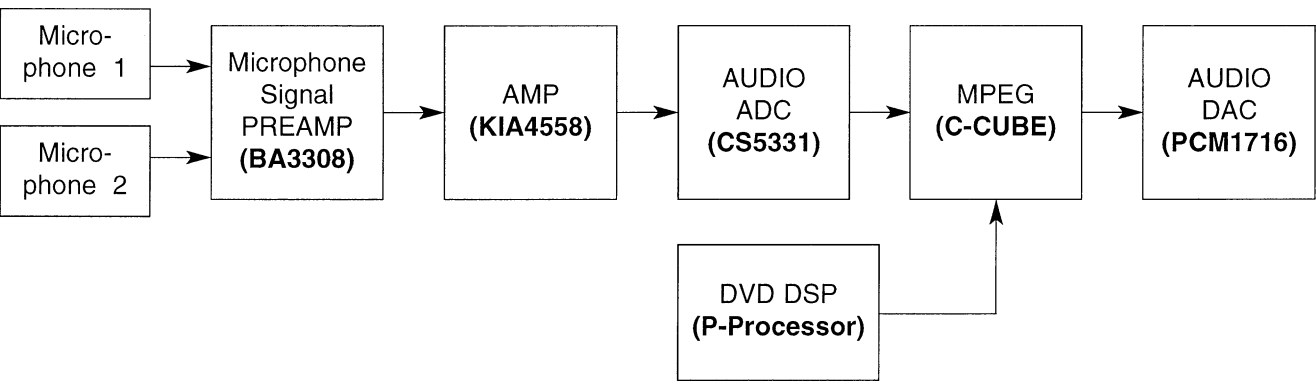
BLOCK DIAGRAM-5 (MPEG)



BLOCK DIAGRAM-6 (SYSTEM CONTROL)



BLOCK DIAGRAM-7 (MIC) <HR>



1. The unit turns to KARAOKE MODE with ou-screen lyrics display and melody sound when it play backs VCD or DVD KARAOKE DISC.
2. IF a microphone is connected at this time, MICOM recoguizes the connection and prepares the composition of external voice and internal melody.
3. The week signal of the microphone is converted to the digital signal after voice output that has passed through PREAMP(BA3308) and AMP(KIA4558) passes through (CS5331) that is Audio ADC(Analog to Digital convertor).
4. This digital signal enters C-CUBE that is MPEG IC and is added to the output of DVD DSP (P-Processor).
5. This mixed signal is output to AV JACK after passing through AUDIO DAC(PCM1716).

